

Analytical Chemistry  
PROPERTY CHANGES OF COALESCED FILM CONTAINING POLYMERIZED  
PHOSPHOLIPID TUBULES

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Phospholipids containing a double bond located on its tail are able to form tubules. Using 1,2-Bis(10,12-tricosadiynoyl)-*sn*-glycero-3-phosphocholine (DC(8,9)PC) to make such tubules, we examine how tubules incorporated into and added to a polymeric matrix affect film formation during coalescence. This model study examines the physical property changes that result from the tubules addition in a poly(methylmethacrylate/butyl acrylate) copolymer. The physical characteristics were examined using Differential Scanning Calorimetry, Internal Reflectance Infrared Imaging, and Dynamic Mechanical Analysis. The initial results have demonstrated that incorporation of the phospholipid tubules before and after synthesis has an effect on the properties that have been studied.